

***Remarks***

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendment, claims 1-46 are pending in the application, with claims 1, 9, 23, 31, 35 and 38 being the independent claims. Claims 23-30, 45 and 46 are sought to be amended. The title has been changed to "Computer Architecture for Recoding Instructions, and Applications thereof." These changes are believed to introduce no new matter, and their entry is respectfully requested.

Based on the above amendment and the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

***New Title***

Applicants have amended the Title to make it more descriptive as requested by the Examiner. The new Title is "Computer Architecture for Recoding Instructions, and Applications thereof."

***Rejections under 35 U.S.C. § 101***

On page 2 of the Office Action, the Examiner rejected claims 23-30, 45, and 46 under 35 U.S.C. 101 as allegedly being directed to non-statutory subject matter. Applicants respectfully traverse this rejection.

Applicants believe that these claims are patentable. However, in order to expedite allowance of the present application in view of new examination guidelines relating to 35 U.S.C. 101, Applicants have amended claims 23-30, 45, and 46 to make it clear that

claims 23-30, 45, and 46 are directed to a tangible computer readable storage medium comprising a microprocessor core embodied in software. In 1995, the Commissioner of Patents and Trademarks conceded to the U.S. Court of Appeals for the Federal Circuit "that computer programs embodied in a tangible medium, such as floppy diskettes, are patentable subject matter under 35 U.S.C. § 101." *See In re Beauregard*, 53 F.3d 1583 (Fed. Cir. 1995).

Reconsideration and withdrawal of this rejection are respectfully requested.

***Rejections under 35 U.S.C. § 102***

On page 3 of the Office Action, the Examiner rejected claims 1-46 under 35 U.S.C. § 102(b) as allegedly being anticipated by U.S. Patent No. 6,167,505 to Kubota (hereinafter "Kubota"). Applicants respectfully traverse this rejection.

Independent claim 1 recites:

1. An instruction fetch unit for a processor, comprising:
  - a first recoder; and
  - a second recoder coupled to the first recoder, wherein the first recoder passes information regarding a first instruction to the second recoder, and the second recoder recodes a second instruction based on the information passed by the first recoder.

Similar features are recited in independent claims 9, 23, 31, 35 and 38.

Kubota does not anticipate the combination of features recited in independent claim 1. For example, nowhere does Kubota disclose or suggest a recoder or using a recoder. A recoder is used to recode a first instruction having a first bit-width to a second instruction having a second bit-width prior to instruction decoding and execution.

Because Kubota does not disclose or suggest the combination of features recited in independent claim 1, claim 1 is patentable over Kubota.

As noted above, independent claims 9, 23, 31, 35 and 38 recite features similar to claim 1 and are also patentable over Kubota for at least the same reasons as claim 1. Dependent claims 2-8, 10-22, 24-30, 32-34, 36-37, and 39-46 depend from one of independent claims 1, 9, 23, 31, 35, and 38, either directly or indirectly, and are patentable over Kubota for at least the same reasons as the independent claims from which they depend and further in view of their own respective features.

Reconsideration and withdrawal of this rejection of claims 1-46 are respectfully requested.

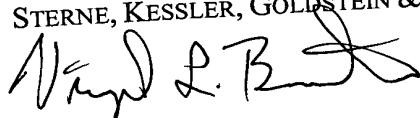
### ***Conclusion***

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully  
requested.

Respectfully submitted,

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Date: May 30, 2006

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